

Section 5-8: Properties of Circles

By the end of this lesson, you should be able to answer:

- What are the relationships among parts of a circle?
- What are the properties of circles and how do you apply them?

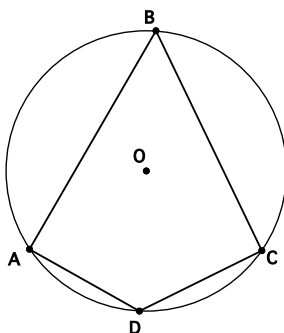
Where you might see this in the real world:

- Market research, food service, art, recreation, navigation

Define the following terms:

1. Circle
2. Radius
3. Chord
4. Diameter
5. Central angle
6. Arc
7. Semicircle
8. Minor arc
9. Major arc
10. Inscribed Angle

Example 1: In circle O , $\widehat{AD} \cong \widehat{CD}$. Find the measures of the angles of quadrilateral $ABCD$, when $\widehat{AB} = 132^\circ$ and $\widehat{BC} = 82^\circ$



Example 2: Identify the following for circle P.

a. the diameter

b. a radius

c. a chord

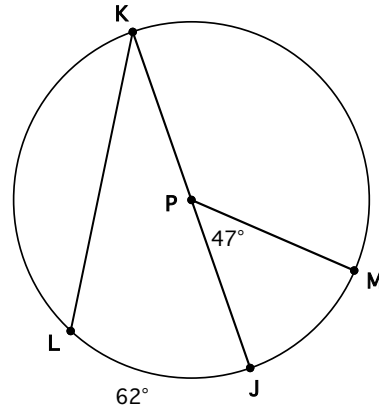
d. \widehat{LM}

e. \widehat{LMK}

f. \widehat{LJ}

g. $m\angle LKJ$

h. a central angle



Problem Set:

"We are so accustomed to disguise ourselves to others that in the end we become disguised to ourselves." - Francois de La Rochefoucauld